

MEAN LAKE LEVELS DURING AUGUST, 1921.

By UNITED STATES LAKE SURVEY.

[Detroit, Mich., September 3, 1921.]

The following data are reported in the "Notice to Mariners" of the above date:

Data.	Lakes. ¹			
	Superior.	Michigan and Huron.	Erie.	Ontario.
Mean level during August, 1921:				
Above mean sea level at New York.....	Feet. 602.77	Feet. 580.18	Feet. 572.49	Feet. 245.93
Above or below—				
Mean stage of July, 1921.....	+0.18	-0.26	-0.41	-0.44
Mean stage of August, 1920.....	-0.16	-0.83	-0.16	+0.31
Average stage for August, last 10 years.....	+0.10	-0.75	-0.14	-0.57
Highest recorded August, stage.....	-1.16	-3.33	-1.62	-2.33
Lowest recorded August, stage.....	+1.17	+0.33	+1.11	+1.58
Average relation of the August level to—				
July level.....		0.00	-0.20	-0.30
September level.....		+0.20	+0.20	+0.30

¹ Lake St. Clair's level: In August, 575.29 feet.

EFFECT OF WEATHER ON CROPS AND FARMING OPERATIONS, AUGUST, 1921.

By J. WARREN SMITH, Meteorologist.

The showery weather that had set in during the latter part of July over most of the interior portion of the country continued during the first half of August, with very beneficial effect on vegetation in that section. It continued dry, however, in the Southwest, including most of Texas and southwestern Oklahoma, while rain was needed in the North Central States and in the dry-farming districts of the Northwest. Considerably cooler weather prevailed in Central and Northern States until the last decade of the month, which also favorably affected cool-weather crops. The last decade was unseasonably warm in the central valleys and Northwest, and crops matured very rapidly during that period. No material frost damage was reported during the month.

The weather was unusually favorable for harvesting small grain crops in the late western and northwestern districts, and this work, as well as thrashing, made rapid

progress. Thrashing was considerably delayed, however, in portions of the middle and upper Mississippi Valley by frequent rainfall, with considerable damage to grain in shock in some localities. Plowing for fall seeding made generally good progress in the principal winter-wheat section, with favoring soil condition. By the middle of the month some wheat had been sown in Montana and South Dakota.

The improvement in corn that was noted the latter part of July continued during the first half of August. By the middle of the month earlier drought had almost entirely been broken from the Ohio Valley northeastward, but it continued too dry in the southwestern Great Plains. Under the influence of unusually high temperatures in the principal corn States during the last decade of the month, the crop matured very rapidly, and by the close considerable corn was safe from frost in Iowa, Missouri, and Nebraska. At the close of the month rain was needed for late corn in many Southern States.

Warm, dry weather continued in the western portion of the cotton belt and cotton deteriorated in most of Texas and Oklahoma because of heat and drought. There was too much rain in some southeastern districts, where the plants made good growth, but put on little or no new fruit, and the crop was generally in unsatisfactory condition, with very little prospect of a top crop. The latter half of the month was generally dry in the cotton-growing States, and mostly poor progress or a general deterioration in the condition of the crop continued. The weather favored rapid opening of bolls, and picking and ginning were in progress at the close of the month in the southern and some central portions of the belt. There was some abatement of weevil activity in Texas and Florida, but they continued plentiful and very damaging in most districts.

Late potatoes, truck, and other miscellaneous crops were improved by rains in most interior States, but were unfavorably affected by dry weather in the Southwest and in much of the Atlantic coast section. Ranges and pastures suffered from lack of moisture in many eastern and southwestern States, as well as in parts of the Northwest. Ranges improved, however, in the lower Rocky Mountain and Plateau districts and stock continued in mostly good condition, except in parts of Texas, where range was poor and stock water scarce.